CLAIMS

1. A semiconductor integrated circuit, comprising

an amplifier circuit of AM broadcast signals having a first P channel MOSFET for amplifying AM broadcast signals and a second P channel MOSFET cascade-connected to the first P channel MOSFET; and

a CMOS digital circuit.

2. A semiconductor integrated circuit, comprising:

an amplifier circuit of AM broadcast signals having a first P channel MOSFET for amplifying AM broadcast signals and a second P channel MOSFET cascade-connected to the first P channel MOSFET; and

a CMOS digital circuit; wherein

the first P channel MOSFET, the second P channel MOSFET and the CMOS digital circuit are formed on the same circuit board by a CMOS process.

3. A semiconductor integrated circuit, comprising:

an amplifier circuit of AM broadcast signals having a first P channel MOSFET for amplifying AM

broadcast signals and a bias circuit for giving a specific bias to the first P channel MOSFET; and

a CMOS digital circuit; wherein

the first P channel MOSFET, the bias circuit and the CMOS digital circuit are formed on the same circuit board by the CMOS process.

4. A semiconductor integrated circuit, comprising:

an amplifier circuit of AM broadcast signals having a first P channel MOSFET for amplifying AM broadcast signals, a second P channel MOSFET cascade-connected to the first P channel MOSFET and a bias circuit for giving a specific bias to the first P channel MOSFET; and

a CMOS digital circuit, wherein

the first P channel MOSFET, the second P channel MOSFET, the bias circuit and the CMOS digital circuit are formed on the same circuit board by the CMOS process.

5. The semiconductor integrated circuit according to claim 1, 2, or 4, which has an AGC circuit for controlling the amplification degree of the second P channel MOSFET.

6. The semiconductor integrated circuit according to claim 2, 3, 4, or 5, wherein

the bias circuit has the third MOSFET which together with the first P channel MOSFET constitutes a current mirror circuit.

7. The semiconductor integrated circuit according to claim 6, wherein

the bias circuit has the third MOSFET which together with the first P channel MOSFET constitutes a current mirror circuit, and makes the ratio of the channel width of the third MOSFET to the channel width of the first P channel MOSFET 1 : k ($k \geqq 1$).

8. The semiconductor integrated circuit according to claim 6 or 7, wherein

the bias circuit is constituted in such a way that one end of either the drain or the source is connected to a power-supply voltage, the other end of either the drain or the source is connected to the constant-current power supply, and the gate is connected to the constant-current power supply.

9. A method of manufacturing a semiconductor integrated circuit which forms a first P channel MOSFET

for amplifying AM broadcast signals and a second P channel MOSFET cascade-connected to the first P channel MOSFET, and a CMOS digital circuit on the same circuit board by the CMOS process.

10. The method of manufacturing a semiconductor integrated circuit, wherein

an AGC circuit for controlling the amplification degree of the second P channel MOSFET is provided.

11. The method of manufacturing a semiconductor integrated circuit according to claim 9, which forms the third MOSFET and the second P channel MOSFET constituting a current mirror circuit , and which makes the ratio of the channel width of the third MOSFET to the channel width of the first P channel MOSFET 1 : k ($k \geqq 1$).